the display by causing the bar to change state, to become lit or unlit, when the corresponding key is depressed. Keys **21, 22, 23, 24, 25, 26, 27, 28, 29, 30, 20,** and **31** correspond to monogram bars **41, 42, 43, 44, 45, 46, 47, 48, 49, 50, 40** and **51**, respectively, and the corresponding bar indications on overlay **19** are **41', 42', 43', 44', 45', 46', 47', 48', 49', 50', 40'** and **51'**, respectively.

In operation, when a character is to be entered into the computer, first the computer is accessed through the telephone line. Secondly, the monogram display **64** will display a predetermined first guess as illustrated. In the preferred embodiment this is the character **8**. By stroking one of the keys, a signal is sent to controller **58**. Controller **58** senses the signal and changes the state of the corresponding bar in the display **64**. Accordingly, if a predetermined first guess is the numeral **8** and key **1** is stroked, then the display will appear as in FIG. **5**. The microchip, according to a predetermine algorithm, will sense the change in bar **41** and generate one or more guesses of the character which is ultimately desired to be transmitted to the computer. Such an algorithm may pick the characters n, m, x and asterisk. If the first guess is correct, an appropriate button on controller **58** can be depressed and the signal sent.

Alternatively, the **3** button could be pressed which would change the display to appear as in FIG. **6**. The computer would then improve the guess and eliminate the choice of n. Once the choices were narrowed to one in this manner, then the signal would automatically be sent. This would eliminate the need for any control keys on the controller **58** itself.

A further alternate embodiment could incorporate a means of display that will be audible as well as, or rather than, visual. For example, the computer could be adapted to generate a second signal that included at least a portion that would generate a human voice simulation in the telephone handset coresponding to the spoken sound of the best guess character. Alternatively, this audible display could be morse code or other audibly recognizable display other than spoken human voice.

As discribed above, the embodiment of FIG. **1** could be modified to utilize a separate rather than integral controller such as controller **58** of FIG. **2**. Moreover, the embodiment of FIG. **2** could be modified to include integral displays on the keyboard of the monogram pattern and best guesses.

A further embodiment of the present invention could utilize a controller such as controller **58** of FIG. **2**, except the controller could be adapted to accept the telephone handset, such as a MODEM does, and to recognize and transmit through the telephone handset. This adaptation would be particularly useful with telephones having non-disconnectable phone line connections, such as in public pay phones.

In another alternate embodiment, selection keys may be provided corresponding to all of the characters displayed, or all of the characters displayed except the best guess. If one of the selection keys is pressed, the corresponding character is entered into the computer. However, if none of the selection keys are pressed, but rather, a second character key is pressed, then the best guess is automatically entered into the computer and a new best guess corresponding to the second character key is generated. In this way, the first character having been guessed correctly, is entered into the computer with, effectively only one stroke.

The above description and drawings are only illustrative of several embodiments which achieve the objects, features and advantages of the present invention, and it is not intended that the present invention be limited thereto. Any modifications of the present invention which come within the spirit and scope of the following claims are considered part of the present invention.

What is claimed as new and desired to be secured by Letters Patent of the United States is:

1. An apparatus for entering data into a computer comprising: signal generating means for selectively generating a plurality of first electric signals; memory means for storing previously entered data; processing means for receiving said first electric signals and, according to a predetermined probability based prediction algorithm, generating a plurality of second electric signals corresponding to one or more alphanumeric characters predicted in response both to said generating means and to said previously entered data; displaying means for receiving said second signals and responsive thereto displaying said corresponding alphanumeric characters; and control means for selectively transmitting a third electric signal corresponding to one or more of said alphanumeric characters to the computer.

2. An apparatus as in claim **1** wherein said signal generating means includes an abbreviated keyboard means wherein one or more keys of said keyboard correspond to more than one character.

3. An apparatus as in claim **2** wherein said display means is integral to said keyboard means.

4. An apparatus as in claim **3** wherein said display means includes a display to display a string of characters either previously transmitted to the computer or stored for subsequent transmission.

5. An apparatus as in claim **2** wherein said processing means is integral to said keyboard means.

6. An apparatus as in claim **2** wherein said processing means is remote to said keyboard means.

7. An apparatus as in claim **6** wherein said control means, said display means and said processing means are positioned in a common housing remote from said keyboard means and in electric communication with said keyboard means and the computer.

8. An apparatus as in claim **7** wherein said keyboard means is a standard telephone.

9. An apparatus as in claim **8** wherein said control means is connected in line between said telephone and said computer.

10. An apparatus as in claim **8** wherein said control means includes transducer means for detecting audible signals submitted by the telephone hand set and transmitting audible signals to the telephone hand set for communication between the control means and the computer.

11. An apparatus as in claim **1**, further comprising a monogram display means and wherein said signal generating means includes an abbreviated keyboard means having a plurality of keys corresponding to the respective elements of the monogram.

12. An apparatus as in claim **11** wherein said display means is integral to said keyboard means.

13. An apparatus as in claim **12** wherein said display means includes a display to display a string of characters either previously transmitted to the computer or stored for subsequent transmission.

14. An apparatus as in claim **11** wherein said control means, said display means and said processing means are positioned in a common housing remote from said key-